

THE ALCIVAX

Alcimed examines the COVID-19 vaccine return policy and other impacts of surging virus variants that continue to shift the playing field.

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Pandemic Improvement & Variant Chaos

"Continuous improvement is better than delayed perfection." - Mark Twain. New COVID-19 cases are dropping steadily each week, with last week delivering the lowest increase since October of 2020. Keep in mind that there is still 2.7M new cases, but it does show signs that the pandemic is slowing. The daily fatality rate has also fallen from its 18K peak to under 10K this week. It is too early to say that this is an effect of the global vaccination effort. The most dramatic drop has been in India, whose 90% critical care bed occupancy rate in Delhi has been reduced to 0.16%.

With variant circulation on the rise, these gains can still be at risk. 2% of previously infected South Africans have been reinfected with the variant. 10% of previously infected US Marine recruits have also been reinfected. While reinfection normally causes milder symptoms, a 58 year old man, previously infected, in France this week, is in critical condition after being infected with the South African strain.

COVID-19 Vaccine Return Policies

South Africa received 1M doses of AstraZeneca's vaccine in early February with another 0.5M doses on the way from the Serum Institute of India. But the South African government is requesting a return, as the AstraZeneca vaccine offers only minimal protection against the dominant South African strain currently circulating. South Africa is now retooling its vaccine rollout with the Johnson & Johnson vaccine for healthcare workers as a pilot experiment to test its effectiveness. Updated AstraZeneca vaccines covering variants could be out as early as October 2021.

Of additional growing concern is the number of fake COVID vaccines being sold all over the world. Mexico busted a fake vaccine trafficking ring this week, just weeks after China confiscated 3,000 fake vaccines and arrested 80 people. While the fake vaccines are just saline filled syringes and are not dangerous, the false hope they sell definitely is. **FYI, all COVID-19 vaccines to date have been purchased by governments and are not available on the private market.**



COVID-19 Vaccine Mandates

As more and more countries roll out vaccine campaigns, the question over vaccine mandates has risen globally. Indonesia, suffering COVID-19's 2nd largest outbreak in Southeast Asia, has made COVID vaccination mandatory for all who are eligible, imposing fines and revoking government services to those who refuse. Spain is not making the vaccine mandatory, they are compiling a registry of all those who refuse the vaccine. The names of those on the registry will be shared with other EU members though it will not be made public.

Companies are also considering whether to make the vaccine mandatory for their employees, with United Airlines announcing it is seriously considering the mandate. In the UK, employers are considering creating "no jab, no job" contracts after the British government concluded the requirements where up to individual companies.

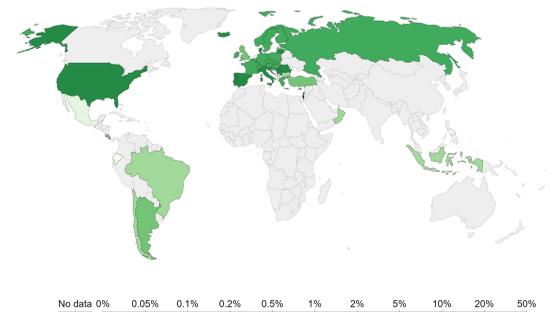
The US Navy is also planning on making vaccines mandatory, as soon as it can, despite nearly 33% of of US military servicemen and women refusing the vaccine when it is offered to them reflecting the high rates of vaccine hesitancy in the US.



The COVID Vaccine Race In Graphs

Turn the world green! 188 M vaccines to date

Share of the population fully vaccinated against COVID-19, Feb 17, 2021
Share of the total population that have received all doses prescribed by the vaccination protocol. This data is only available for countries which report the breakdown of doses administered by first and second doses.

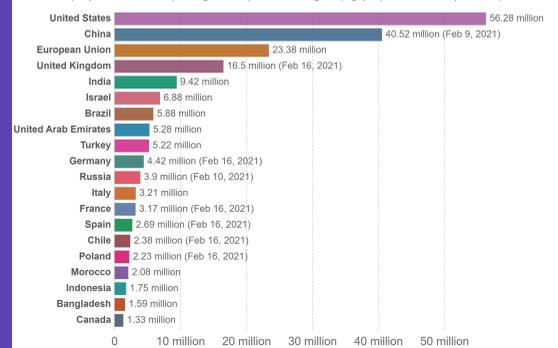


Source: Official data collated by Our World in Data - Last updated 18 February, 09:30 (London time) OurWorldInData.org/coronavirus - CC BY

The US is administering over 1M doses per day, which is 25% of the doses given globally per day.

COVID-19 vaccine doses administered, Feb 17, 2021

Total number of vaccination doses administered. This is counted as a single dose, and may not equal the total number of people vaccinated, depending on the specific dose regime (e.g. people receive multiple doses).

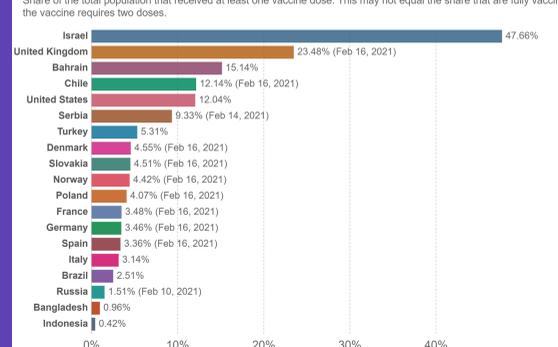


Source: Official data collated by Our World in Data - Last updated 18 February, 09:30 (London time) OurWorldInData.org/coronavirus - CC BY

Israel approaches 50% of its population vaccinated while the US gains only an additional 4%.

Share of people who received at least one dose of COVID-19 vaccine, Feb 17, 2021

Share of the total population that received at least one vaccine dose. This may not equal the share that are fully vaccinated if the vaccine requires two doses.

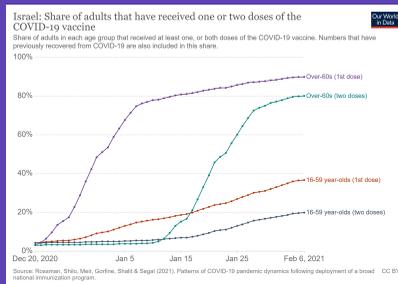
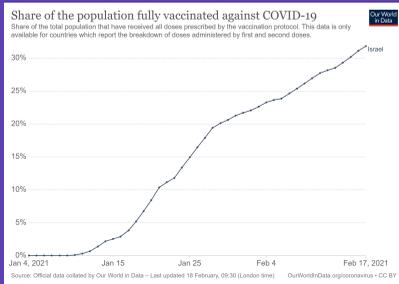


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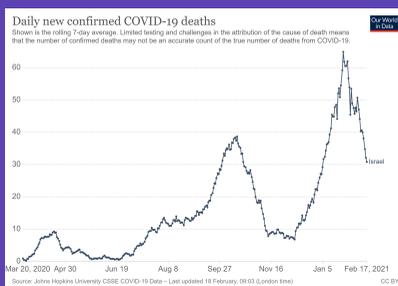
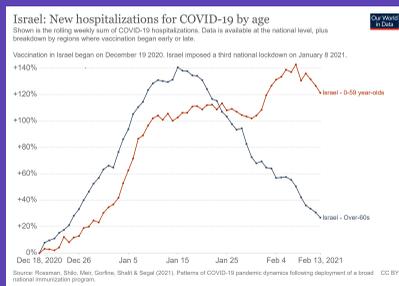
COVID-19 Vaccine Campaign Effects

Israel is currently conducting the world's largest real world evidence vaccine trial as it rushes to vaccinate the entire country. According to the current data the Pfizer vaccine is 94% effective in the general population, replicating the high efficacy seen in clinical trials. Israel has not yet decided to easy lockdowns despite the significant decrease in new cases and hospitalizations since the vaccination campaign began as it is not yet clear if the vaccine blocks transmission of the virus from person to person.

Here we explore some of the important metrics that demonstrate the impact of vaccination on the pandemic in Israel.



More than 30% of Israel's population has been fully vaccinated, with 80% of >60 year olds having received both doses and almost 20% of other adults also being fully vaccinated. The real impact has been on hospitalizations, especially in the elderly as well as drastically reducing the daily death toll:



Russia's Vaccine Diplomacy Bet

While COVID vaccine scarcity and Western governments sweeping up much of the available 1st wave vaccine, global tensions have increased, with many medium and low income countries crying foul. In the vaccine development process, many cried foul at Russia for creating shortcuts for its Sputnik V vaccine's approval process. But a recent peer reviewed publication of its efficacy in the Lancet has largely allayed those fears for other countries looking for vaccine and Russia is taking full advantage.

- 26 countries in the world have approved the Russian vaccine.
- As of this month the following countries are already using the Sputnik V vaccine: Bolivia, Algeria, Kazakhstan, Turkmenistan, Palestine, the UAE, Paraguay, Hungary, Armenia, Bosnian Serb Republic, Venezuela and Iran.
- Belarus, the UAE, India and Venezuela are also conducting Phase 3 trials with the Sputnik V vaccine.
- The Sputnik vaccine is gaining ground rapidly in Latin America, with authorization in 6 LATAM countries: Argentina, Bolivia, Mexico, Nicaragua, Paraguay, and Venezuela, with Columbia to soon become the 7th.
- Despite the bad blood between many Latin American states and Russia, the ease of putting vaccine contracts in place is winning governments over.
- It is also gaining ground over Pfizer because it is cheaper and easier to store.
- The millions of dollars generated in vaccine sales will go along way towards easing Russian economic struggles resulting from Western sanctions.



The COVID AI BOON

The pandemic has forced a lot of changes in our lives. Industries have surged and industries have failed as we have globally adjusted to a new set of circumstances. One of the biggest boon has been in the adoption of AI in an ever increasing number of industry functions.

AI has long been used in biological research to search for complex patterns and machine learning used to model population behavior. AI has now been applied to determine which mammalian species are capable of bring the next coronavirus pandemic. Bats for example can harbor up to 68 coronavirus strains at a time. The study also highlighted several animals is close proximity to humans that can harbor coronaviruses, such as hedgehogs, European rabbits and domestic cats.

AI is also easing life in this pandemic. AI has rapidly become an HR managers best friend with 24% of businesses having adopted AI to help manage their hiring process. But don't worry you won't be interviewed by a robot any time soon.

You can however talk to an AI chat bot about your feelings. While the use of AI chat bots in mental health are not new, the first being used in 1966. the demand for such bots has skyrocketed during the pandemic in league with increased demand for other telemedicine services for mental health. With in person therapy coming with weeks long waits, chat bots are here now.



All Joking Aside



The Louvre normally takes up to 10,000 visitors a day, but it has been closed since October. 250 workers have been busying themselves in the interim, restoring works and redesigning galleries so it will seem brand new when it reopens. But not everyone is

Image Credit: [Art Forum](#)

happy with the work. Renovation is underway to the Bronze room, for which Cy Twombly painted the ceiling in 2021. But restoration plans to put the room back to its pre-1930's red walls. The Twombly foundation has called the restoration an "odious affront" and is demanding the original color return. We aren't sure who will win!

Apple has announced a replacement of the syringe emoji so you can more effectively brag about your COVID-19 vaccine. Conveniently, they also added three new smiley faces so you can describe your vaccine side effects.



Image Credit: [Emojipedia](#)

COVID VALENTINES!

India: Sanitizing Love



Image Credit: [Ismat Tasheen](#)

US: Cupid Hesitancy



Image Credit: [George Russell](#)

France: Roses are essential



Image Credit: [Chappette](#)

US: Love is a Vaccine



Image Credit: [Marshall Ramsey](#)